

It is much like the type as described by Taylor (Univ. Kansas Sci. Bull. 26: 470-473, fig. 7, pl. 50, 1939 [1940]). The body is somewhat compressed, the keels on the dorsal scales are rather well defined, the head is relatively elongate, the eyes are large, and the posterior chinshields are nearly half the length of the anterior. As in the type a pair of chinshield-like scales precedes the first ventral, following the other chinshields. The loreal is elongate, separated from eye by the preoculars, which are 2-3 in number; temporals 1-2-2, 1-2-3; supralabials 8-8, infralabials 9-9; the prefrontals are a little larger, about $2\frac{1}{2}$ times as long as internasals. The dorsals are in 17 rows. The ventrals are 184, subcaudals 78. Since the specimen is a male, there are rather prominent knobbed keels above the anus, and numerous small, well-defined tubercles on the chin, throat and extreme anterior part of belly. Total length 603 mm, tail 153 mm.

The markings are much as in the type. The light gular area is not stippled, although the dorsal nuchal band (complete instead of interrupted medially) is finely mottled as in the type. The light bands are narrower posteriorly, most split medially with the halves alternating; they are not broken up into spots as in the type. Most of the dark rings reach the mid-venter, but only the anterior five are complete since the remainder is staggered; the light bands become wider on the lateral scale rows and on the belly.

The differences from the type exhibited by

this specimen are so few that they seem certainly conspecific. The somewhat greater regularity of the dorsal pattern, as well as the lower ventral count, in the Oaxaca specimen suggests more strongly than before a close relationship of *fasciata* and *guerreroensis*. This curious situation, in which a Yucatán form finds its closest relative on the Pacific coast of Mexico north of the Isthmus of Tehuantepec, has a parallel in other snake genera, as for instance *Lampropeltis* and *Stenorrhina*. It is not impossible in this case, as in the others, that the forms involved actually intergrade somewhere on the Isthmus.

A number of references to *Tropidodipsas fasciata* (Sumichrast, Arch. Sci. Phys. Nat., 46: 246-247, 249. 1873; and Mocquard, Miss. Sci. Mex., livr. 16: 872-873, pl. 70, fig. 3, 1908) and *Leptognathus fasciatus* (Sumichrast, Bull. Soc. Zool. France 5: 184. 1880; and La Natureza 6: 44. 1882) from the Isthmus of Tehuantepec (Santa Efigenia, Cacoprieto) probably are referable to *T. guerreroensis*. The counts given by Mocquard (184 to 186 ventrals) for three specimens from "Mexico" and "Isthmus of Tehuantepec" agree with those of *guerreroensis*, and accordingly his illustrations probably are of that species. The identity of specimens recorded as *Leptognathus fasciatus* from Jicaltepec, Córdoba and San Andrés Tuxtla, Veracruz (Sumichrast, La Natureza 6: 44. 1882; and Ferrariperez, Proc. U. S. Nat. Mus. 9: 183. 1886) remains in doubt, but may well be correct. I can find no references in the literature that might apply to *T. macdougalli*.

ICHTHYOLOGY.—Review of the genera of blennioid fishes related to *Ophioblennius*.¹ EARL D. REID. (Communicated by LEONARD P. SCHULTZ.)

During the past few years I have attempted to identify certain blennioid fishes from the tropical Atlantic and Pacific Oceans. Many of these specimens were not identifiable with forms referred to the genus *Ophioblennius*. As the material was assembled and studied, it became more apparent that a review of this group of genera was needed. This report is a summary of my findings, based on material in the collections of the United States National Museum.

¹ Published by permission of the Secretary of the Smithsonian Institution. Received July 30, 1943.

After carefully studying all the available material related to *Ophioblennius*, the following key was prepared, giving the salient characters that I have concluded are most useful in recognizing the various genera:

- 1a. Gill openings not restricted, forming a free fold across isthmus.
- 2a. Strongly hooked canine teeth in front of upper and lower jaws.
- 3a. Ventral fins composed of a concealed spine and two rays; lateral line incomplete. *Ophioblennius* Gill
- 3b. Ventral fins composed of a concealed spine and four rays; lateral line complete or nearly so, a few pores lacking posteriorly. *Leoblennius*, n. g.

- 2b. Canine teeth absent in upper jaw, four strongly hooked canines near symphysis of mandible; lateral line very short
 *Blenniella*, n. g.
- 1b. Gill openings restricted, the membrane attached to and not forming a free fold across isthmus.
- 4a. Four strongly hooked canine teeth in front of both jaws; gill openings restricted, membrane attached near base of lower pectoral ray *Gloriella* Schultz
- 4b. Canine teeth absent in upper jaw, a single series of conical teeth directed forward with a tendency to flare outward; gill openings wider but restricted, width of isthmus about equal to diameter of pupil
 *Giffordella* Fowler

Genus *Ophioblennius* Gill

Blennophis Valenciennes, in Webb and Barthelot, Îles Canaries, Poiss., 1843, p. 60, name preoccupied (*B. webbii* Valenciennes).

Ophioblennius Gill, Proc. Acad. Nat. Sci. Philadelphia 12: 103. 1860 (genotype: *B. webbii* Valenciennes); substitute for *Blennophis* Valenciennes, not *Blennophis* Swainson, a genus of Clinidae.

The genus *Ophioblennius* is widely distributed in the tropical Atlantic along the west coast of Africa and from the West Indies to Trinidad. In the Pacific it occurs from the coast of southern California to the Galápagos, Chile to the Marquesas, and the Hawaiian Islands. No species, so far, has been found away from the island or group of islands from which the type was recorded. Most of the specimens as yet collected have been attracted to an electric light and captured in a dip net when this equipment was used from the ship's side while at anchor.

I find the dermal filaments, number of rays in the vertical and paired fins, and length of the lateral line among the characters studied most reliable for specific distinction. The recurved canine teeth at the symphysis of the jaws and the naked body together with the usually forked caudal fin will serve as characters for field recognition of *Ophioblennius* and related genera.

Description.—Body oblong, compressed, scaleless; snout short, high, abruptly decurved anteriorly. Lateral line incomplete, vertical fins long, dorsal composed of spines and soft rays, a notch at point of differentiation, anal similar to soft dorsal with two spines, dorsal and anal fins usually free from caudal, the latter lunate or forked. Upper jaw with 2 or 4 strongly hooked

canine teeth on the premaxillaries followed by a single series of minute conical teeth loosely attached to the gums and easily movable, these teeth grouped into units of several teeth each and spaced at short intervals so that each group appears as a single deeply incised tooth with 5 to 8 cusps. Lower jaw with 4 strongly hooked canine teeth near symphysis of the mandible, the outer pair more or less horizontal, their tips strongly bent or hooked toward the rictus, usually 1 or 2 curved canines at about midlength of the mandible, the posterior much the larger. Gill openings wide, free from the isthmus, the membrane forming a free united fold across latter in front of the insertion of the ventral fins. Ventral fins composed of a hidden spine and 2 rays. A strongly marked genus, perhaps allied to *Blennius*.

KEY TO THE SPECIES REFERRED TO OPHIOBLENNIUS

- 1a. Four strongly hooked canine teeth in front of upper and lower jaws.
- 2a. Pectoral fins short, not reaching origin of anal fin.
- 3a. Dorsal XII, 19 or XII, 20; anal II, 20 or II, 21.
- 4a. Nape with a pair of tentacles on each side of midline.
 *ferox* Beebe and Tee Van
- 4b. Nape without tentacles on each side of midline.
 *watsoni*, n. sp.
- 3b. Dorsal XVI, 20; anal 26 (probably II, 24)
 *trinitatis* Ribeiro
- 2b. Pectoral fins long, reaching well past origin of anal fin.
- 5a. Dorsal spines X to XII.
- 6a. Dorsal spines XII.
- 7a. Anal II, 22 or 23; dorsal XII, 22 or XII, 23.
- 8a. Color brownish, a black ocellus on preopercle behind eye, caudal fin with longitudinal dark stripes.
 *steindachneri* Jordan and Evermann
- 8b. Color pallid, a dark area at occiput and a dark vertical bar at base of caudal fin. . . . *pinchoti* Fowler
- 7b. Anal II, 14 or 15.
- 9a. Dorsal soft rays 16; anal II, 15.
- 10a. A pair of tentacles at the nape on each side of midline, pectorals black, tipped with coarse punctulations.
 *xiphiodon* Clark
- 10b. A comb of tentacles at nape on each side of midline, color pallid. . . . *fernandezensis* Clark
- 9b. Dorsal soft rays 12 to 14; anal II, 14 or II, 15.

- 11a. Dorsal XII, 13; fringe of tentacles at nape gray-black; notch in dorsal fin shallow, less than half length of first soft ray... *vanderbilti* Fowler
- 11b. Dorsal XII, 13; fringe of tentacles at nape pale; dorsal fin with a definite space between spines and soft rays
..... *clarki*, n. sp.
- 6b. Dorsal spines X.
- 12a. Dorsal soft rays 13; anal 14 (probably II, 14)... *phalacrus* Clark
- 12b. Dorsal soft rays 20; anal 20....
..... *webbii* Valenciennes
- 5b. Dorsal XIV, 20; anal 21 (probably II, 21); no tentacles at nape....
..... *lanieri* Seale
- 1b. Two strongly hooked teeth on premaxillaries and four similar canines at symphysis of mandible; a fringe of 28 tentacles extending across nape, fringes pale, dorsal notched nearly to base of fin; dorsal XII, 13; anal II, 14.... *capillus*, n. sp.

Ophioblennius ferox Beebe and Tee Van

Ophioblennius ferox Beebe and Tee Van, *Zoologica* 10(1): 242-244, fig. 1928 (Haiti); Longley, Carnegie Inst. Washington Yearbook 32: 293-295. 1933 (name only).

U.S.N.M. 120028, 8 examples, 40 to 45.4 mm, Fort Landing, Saba Island, D. W. I., April 11, 1937; Smithsonian-Hartford Exped. Coll., Dr. Waldo L. Schmitt. U.S.N.M. 120029, 2 specimens, 44 to 45 mm, St. Eustatius, off Oranjestad, D. W. I., April 12, 1937, Smithsonian-Hartford Exped. Coll., Dr. Waldo L. Schmitt.

Description.—The standard lengths in millimeters are 45; 44; 42.8; 45; 43.5; 45.4; 43.4; 41.4; 40; 42, respectively. The following measurements are expressed in hundredths of the standard lengths, respectively: Head 22.2; 24.1; 24.1; 23.4; 22.5; 21.8; 23.3; 23.0; 22.7; 23.8. Depth 20.5; 22.7; 21.0; 20.0; 20.5; 19.6; 20.7; 20.5; 19.0; 21.2. First dorsal spine 12.7; 13.6; 12.6; 13.3; 12.6; 13.0; 12.7; 12.3; 13.0; 13.1. Depth caudal peduncle 7.8; 7.5; 7.5; 7.3; 7.4; 7.1; 8.1; 7.7; 8.0; 7.6. Length of snout 6.0; 6.6; 7.0; 5.6; 6.2; 5.7; 6.2; 6.5; 6.2; 6.0. Interorbital 5.1; 5.5; 5.6; 5.1; 5.1; 4.8; 5.1; 5.3; 5.5; 5.5. Diameter of eye 6.7; 6.8; 6.8; 6.7; 6.4; 6.4; 6.5; 6.8; 7.0; 6.9. Pre-anus² 46.7; 45.5; 46.5; 47.4; 43.6; 46.7; 46.1; 48.1; 46.8; 46.2. Pre-dorsal² 24.2; 23.6; 23.8; 23.3; 24.4; 22.9; 23.7; 24.7;

23.8; 25.2. Length pectoral fin 18.7; 20.0; 19.4; 19.6; 19.6; 19.6; 19.7; 19.6; 19.3; 20.0. Base of anal fin 46.4; 48.2; 47.2; 47.6; 49.0; 48.4; 47.4; 46.9; 46.2; 49.3.

D. XII, 19 or 20; A. II, 20 or 21; P. 15; 15; Br. 5. Body moderately elongate, compressed, the profile convex before eyes, nearly straight from orbits to origin of dorsal fin, which is slightly behind the posterior margin of the preopercle, spines and soft rays of about equal height, the fin with a moderate notch at juncture of spines and soft portion, tips of last rays of vertical fins reaching nearly to caudal base, the peduncle notably deeper than long, anal similar to soft dorsal and preceded by two small spines. Caudal fin moderately forked, the lobes about even, its length about four-fifths that of the pectoral, the tips of which reach about opposite to, or fall a trifle short of, the anus, upper rays of pectoral rather weak, the first about equal to eye diameter, the following rays evenly graduated to the tenth or eleventh, which are longest, the lower rays are somewhat thickened. Ventrals I, 2, inserted well in advance of pectoral base, their tips reaching about opposite tip of lower pectoral ray or midway to the anus. Upper jaw nonprotractile, upper lip attached to snout anteriorly. Four strongly recurved canine teeth on the premaxillaries, followed by a single series of minute conical teeth set in groups of six or seven and loosely attached to the gums and easily overlooked. Mandible with four similar canines at the symphysis, the outer pair nearly horizontally deflected outward, their tips directed toward the rictus, these followed by one or two pairs of curved canines about midlength of the lower jaw, the mandible sharply compressed to a coulterlike edge and forming an angle just behind the lateral canines. Lips thin, closely adhering to the jaws, lower jaw slightly included, the gape small, little oblique, maxillary reaching anterior edge of pupil. Gills 4, a small pore behind last, gill rakers 14, small acute points. Pseudobranchiae developed. Nostrils well separated, the anterior about midlength of snout digitate with six graduated filaments, the longest reaching hind rim of posterior nostril, which is situated just before vertical through anterior rim of eye. Orbital tentacle simple, equals pupil diameter, nape with a pair of filaments on each side of midline about one-fourth length of orbital tentacle. Lateral line incomplete, arched

² Distance from tip of snout to anus or tip of snout to dorsal origin.

high over pectoral and ending below anterior rays of soft dorsal.

Color in alcohol light straw generally, lips and occiput with dark bluish shade, dark points forming a shaded area across occiput in front of dorsal and a sprinkle of brownish pigment inside gill cavity, at base of vertical fin rays and a dark shade or dot at base of caudal rays, forming a dark line that fails to reach the upper and lower margins of the fin. Peritoneum silvery but profusely dusted with dark pigment showing through the ventral surface of the abdominal wall as a dark area from base of ventral fins to anus.

Remarks.—This species differs from *watsoni* in having a pair of filaments on either side of the midline at the nape.

Ophioblennius watsoni, n. sp.

Fig. 1

Blennophis webbii Steindachner (not of Valenciennes), Sitzb. math.-nat. Classe Akad. Wiss. 56(1): 354. 1867 (Barbados).

Holotype.—U.S.N.M. 89614, Anse à Galets, La Gonave Island, Haiti, W. I., March 22, 1930, standard length 46 mm. Coll. Watson M. Perrygo. Paratype: U.S.N.M. 120097, same data as holotype. Standard length 44 mm.

Description.—The following measurements are expressed in hundredths of the standard length, respectively: Head 21.5; 22.7; depth 17.6; 20.9; first dorsal spine 12.8; 12.5; depth caudal peduncle 6.5; 6.8; length of snout 5.0; 5.5; interorbital space 4.35; 5.0; pre-anus 43.5; 43.0; predorsal 22.8; 22.9; length of pectoral fin 20.9; 19.1; base of anal fin 48.5; 45.9.

D. XII, 19 or 20; A. II, 21; P. 15; 15. V. I, 2. Br. 5. Body naked, oblong, compressed. Profile convex, rather steep from upper lip to above eye, then nearly straight with oblique elevation to origin of dorsal fin, which is situated just before upper angle of gill opening. Dorsal spines slightly lower than soft rays, the fin with a shallow emargination at juncture of differentiation, the posterior spine notably weaker than those preceding, the posterior ray weak, terminating about midlength of the caudal peduncle, which is slightly longer than deep. Anal similar to soft dorsal, the rays preceded by 2 spines. Caudal fin forked, the lower lobe a trifle longer than the upper, about equal to length of pectoral fin which reaches to vertical of the anus, the rays graduated from the upper which is very feeble to tenth which is longest, lower rays somewhat

thickened. Ventrals inserted below posterior margin of the preopercle, their tips reaching anterior third of pectoral. Upper jaw nonprotractile, the upper lip free laterally, gape small, oblique, maxillary terminus below anterior margin of the pupil. Four strongly retrocurved canines on the premaxillaries, behind which is a series of minute conical teeth in groups of 7 or 8 teeth each, these units appearing to the unaided eye as single, deeply incised teeth with a short interval between each group, they are loosely attached to the gum and movable. Lower jaw with similar dentition, the outer pair of canines near symphysis of mandible deflected and partly concealed by the lower lip, a small canine about midlength of the mandible and a large curved canine immediately following. Gill rakers very small, 16 on the anterior arch. Pseudobranchiae developed. Nostrils well separated, the anterior with a digitate appendage, posterior nostril above anterior rim of the eye. Orbital filament very small, simple, its length about one-third pupil diameter. Nape without filaments. Lateral line incomplete terminating below third dorsal ray.

Color in alcohol light straw generally, upper lip with dark pigment, a dark shade transversely at occiput, some faint dark spots at base of dorsal fin supports and a dark vertical line at base of the caudal rays, not extending to the rudimentary elements, anal fin translucent. Gill cavity with dark specks, peritoneum silvery with dark pigment. Abdomen from insertion of ventral fins to just before vent with silvery sheen dusted with dark pigment.

Remarks.—This new species may be differentiated from all others referred to the genus *Ophioblennius* by means of the key on page 374. It is distinguished from *ferox* by the absence of filaments at the nape.

Named *watsoni* in honor of the collector, Watson M. Perrygo, of the United States National Museum.

Ophioblennius trinitatis Ribeiro

Ophioblennius trinitatis Ribeiro, Arch. Mus. Nac. Rio de Janeiro 22: 177, fig. 1. 1919 (Trinidad).

Description.—Head $\frac{1}{4}$ in the standard length. Dorsal XVI, 20; anal II, 24; ventral I, 2. Depth 4–4.5; mouth small, reaching vertical through anterior rim of the orbit. Four strongly hooked canine teeth on the premaxillaries and four similar canines at symphysis of the mandible.

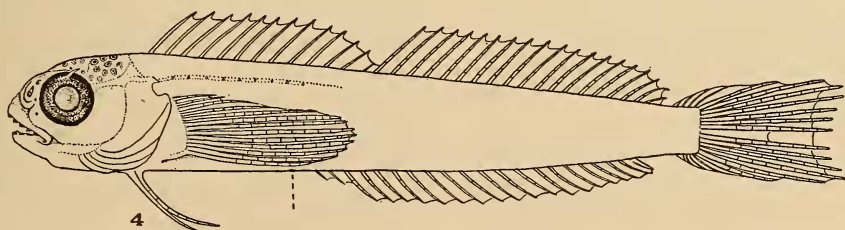
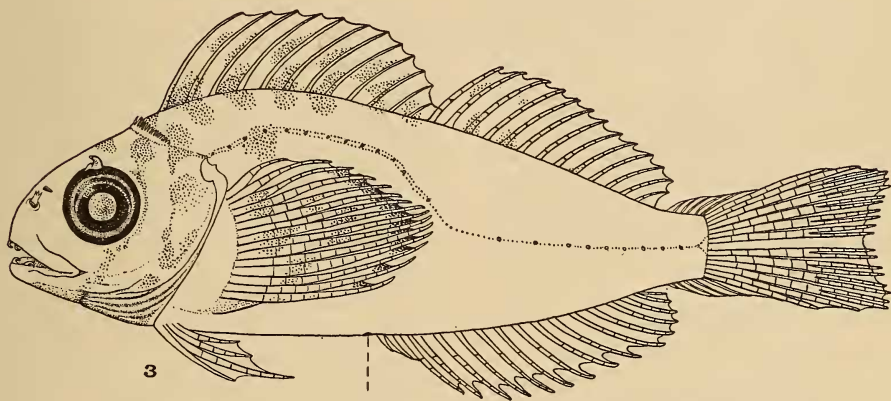
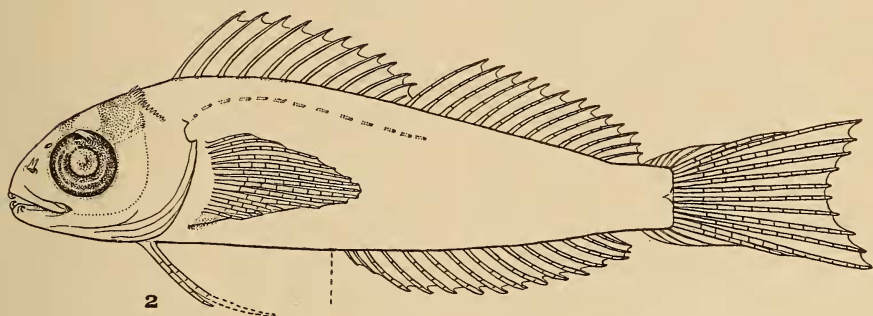
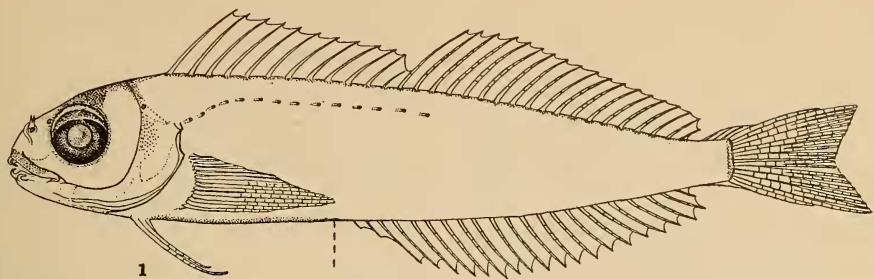


Fig. 1.—*Ophioblennius watsoni*, new species: Holotype (U.S.N.M. 89614), 46 mm. in standard length. Fig. 2.—*Ophioblennius capillus*, new species: Holotype (U.S.N.M. 120032), 21.8 mm. in standard length. Fig. 3.—*Leoblennius schultzi*, new genus and species: Holotype (U.S.N.M. 118037), 25.4 mm. in standard length. Fig. 4.—*Blenniella rhessodon*, new genus and species: Holotype (U.S.N.M. 118029), 22.6 mm. in standard length. Drawn by Mrs. Aime M. Awl, U. S. National Museum.

ble, the inner pair recurved, the outer pair larger and flaring outward at an angle, their tips curved posteriorly; these are followed by a pair of small curved teeth at midlength of the gape and a larger pair of curved canines immediately following. Upper lip delicately crenulated, a series of minute conical teeth loosely implanted on the gums and easily movable. Anterior nostril with filaments, a filiform tentacle above the eye. Interorbital space equal to diameter of the orbit. Pectoral fin pointed, not quite reaching origin of anal. Dorsal fin with a slight marginal indentation at juncture of spines and soft rays, the latter slightly more elevated, vertical fins free from caudal, the latter forked. Ventral fins subjugular, their length equal to postorbital length of the head.

Color (3 per cent formalin) flesh-colored, eyes black, an indistinct stain behind the orbit; a streak of the same color descends from the neck across the optic region and spreads over the isthmus; a series of 11 spots, moderately dark, along the side to base of the caudal fin; a series of similar spots along the back, alternating with those of the flank and encroaching upon the base of the dorsal; other fins immaculate. Total length 52 mm.

Remarks.—I have not seen an example of the present species; the description is based on a translation of the original description, together with additional features shown by the figure. Differs from *steindachneri* in the greater number of spines in the dorsal fin and in the greater number of rays in the anal.

Ophioblennius steindachneri

Jordan and Evermann

Blennophis (Ophioblennius) webbia Steindachner, Ich. Beitr. 8: 41. 1879 (5 specimens, 70 mm. long, from Navidad near Mazatlán and the Tres Mariás Islands).

Ophioblennius steindachneri Jordan and Evermann, U. S. Nat. Mus. Bull. 47(3): 2401. 1898 (Tres Mariás Islands). (After Steindachner.)

A single example in good condition, U.S.N.M. No. 120030, standard length 59.4 mm., locality doubtful,³ is preserved in the U. S. National Museum.

Description.—The following measurements

³ This bottle contained a mixture of west coast fishes and an old label: "Paraguay, Bahia. Dr. E. Palmer." These specimens probably were obtained in the Gulf of California during Dr. Palmer's visit to the mouth of the Colorado River.

are hundredths of the standard length: Head 23.2; depth 20.6; first dorsal spine 13.5; depth caudal peduncle 6.9; snout 5.6; interorbital 3.7; eye 6.9; pre-anus 43; predorsal 20.5; length of pectoral 24.4; base of anal fin 49.5.

D. XII, 23. A. II, 23. P. 15; 15. V. I, 2. Br. 5. Body oblong, compressed, profile strongly convex from upper lip to above eyes, then nearly straight to origin of dorsal fin. Insertion of dorsal above margin of preopercle, the spinous and soft portions of about equal height, divided by a notch about half the depth of the fin, posterior ray free from caudal, its tip reaching rudimentary caudal rays. Caudal peduncle about one-third deeper than long, anal similar to soft dorsal and of equal length. Caudal fin moderately forked, outer rays notably shorter than the long pectoral, which reaches to opposite third anal ray, upper ray of pectoral about equal to diameter of the eye, ninth and tenth rays longest, lower 6 rays much stronger and somewhat thickened. Ventral fins inserted well forward, their midlength below pectoral base. Upper jaw nonprotractile, lip joined to tip of snout by broad frenum, free laterally. Gape moderate, little oblique, maxillary reaching about opposite anterior edge of pupil. Upper jaw with 4 strongly hooked canine teeth on the premaxillaries, the outer pair largest and strongly angulated. A series of minute loosely attached conical teeth implanted on the gums in groups of 7 or 8 teeth each and appearing as 5 or 6 deeply incised teeth on either side of the jaw, this series is not interrupted by the anterior canines. Four similar canines at symphysis of mandible, the outer pair deflected almost horizontally, their tips directed toward the rictus and nearly concealed by the lower lip. These followed by 2 curved canines at about midlength of the gape, the posterior one much the longest. Gill rakers about 12 (count not certain). Anterior nostril with 10 or 11 filaments, orbital tentacle simple about equal pupil diameter, 5 or 6 small hairlike filaments on either side at nape. Lateral line incomplete, convex anteriorly and running an eye diameter below dorsal fin terminating below fifth dorsal ray.

Color in alcohol dark chocolate generally, a dark ocellus on upper region of preopercle behind eye, outer caudal rays somewhat lighter.

Remarks.—This specimen agrees very well with the description of *steindachneri* and probably was taken on the west coast of Mexico by

Dr. E. Palmer. It was found in a bottle with five other blennies labeled "Paraguay, Dr. E. Palmer." Although Dr. Palmer collected in Paraguay and in the Gulf of California, the present specimen obviously could not have been taken in the southern locality.

This species is very close to *pinchoti* but has an entirely different color pattern. Other differences are indicated in the key on page 374.

Ophioblennius pinchoti Fowler

Ophioblennius pinchoti Fowler, Proc. U. S. Nat. Mus. 80(6): 13-14, fig. 3. 1932 (Galápagos)

Holotype.—U.S.N.M. 91819, 1 specimen, Black Beach Anchorage, Charles Island, Galápagos Islands, June 27, 1929, A. K. Fisher.

Paratypes.—U.S.N.M. 91820, same data, 16 cotypes.

Other specimens.—Four additional examples collected as follows: Marchena Island Anchorage, Galápagos Islands, December 3, 1934, 3 specimens, W. L. Schmitt, U. S. N. M. 101930; Tagus Cove, Albemarle Island, Galápagos Islands December 9, 1934, 1 specimen, W. L. Schmitt.

Description.—Of 11 examples measured, the standard length in mm. is 45; 45.1; 43.4; 42.3; 42.4; 40.8; 40; 39.6; 35.9; 39; 47. The following measurements are expressed in hundredths of the standard length, respectively: Head 25.1; 24.9; 25.8; 24.6; 24.8; 24.3; 24.5; 25.5; 26.7; 24.9; 26. Depth 22; 22.6; 22.6; 20.6; 20.3; 19.4; 19.3; 18.2; 15; 18.5; 21.3. First dorsal spine 13.8; 12.2; 12.7; 13; 13.5; 13.2; 13.3; 11.9; 14.5; 13.8; 10.6. Depth caudal peduncle 7.8; 8; 8.1; 8.3; 7.5; 7.6; 7.8; 7.6; 8.1; 7.2; 7.4. Length of snout 6.4; 6.4; 6.5; 6.1; 6.8; 6.1; 5.8; 6.1; 5.6; 6.4; 7.4; Interorbital width 5.8; 6; 6; 5.4; 5.2; 5.1; 6.5; 5.1; 5.6; 6.2; 5.3. Diameter of eye 7.1; 7.5; 7.8; 7.3; 7.5; 7.8; 8.5; 8.1; 8.1; 8.2; 7.9. Pre-anus 44; 42.6; 43.1; 40.7; 40.6; 41; 39.3; 41.7; 39.6; 40.6; 44.2. Predorsal 22.7; 23.3; 24.9; 24.1; 24.8; 24.3; 22.5; 24.2; 24.5; 25.1; 23.4. Length of pectoral fin 23.1; 22; 23.5; 23.4; 22.4; 23.3; 26; 22.8; 22.8; 21.8; 25.1. Base of anal fin 48.2; 48.6; 48.6; 53.2; 52.4; 50.7; 53.5; 50.8; 54.3; 51.8; 47.4.

D. XII, 22 or 23. A. II, 22 or 23. P. 15, 15 or 16, 16. Br. 5. Body oblong, compressed, profile of snout from upper lip to posterior nostril strongly convex then nearly straight to origin of dorsal fin, which is slightly behind occiput, spinous portion of dorsal fin a little lower than

soft rays, the juncture marked by a moderate notch, tip of last ray about reaching midlength of the caudal peduncle which is slightly deeper than long, anal similar to soft dorsal and of equal length, preceded by two spines, caudal fin forked, about equal to length of pectoral which reaches to opposite third anal ray. Upper rays of pectoral fin much shorter and weaker than lower rays which are long and somewhat thickened, the fifth and sixth rays longest. Ventral fins advanced, their insertion well in front of pectoral base, their tips reaching midlength of the latter or slightly more than half way to first anal spine. Upper jaw nonprotractile the upper lip free laterally. Four strongly hooked canine teeth at front of upper jaw, their tips pointing backward, the outer pair a trifle largest, vomer and palatines toothless. Lower jaw with four similar canines, the outer pair flaring outward nearly horizontally with their tips strongly bent toward the rictus and partly concealed by the lower lip, easily detected by passing the finger forward along the edge of the mandible, these are followed by a minute curved canine tooth about midlength of the gape immediately behind which is a long curved canine tooth, largest of the group. Gills four, a small pore behind last, rakers minute, 22 on first arch, pseudobranchiae well developed. Nostrils well separated, the anterior about midlength of snout supporting a digitate appendage on the inner edge with 8 filaments, posterior nostril just before perpendicular through anterior edge of eye, orbit with a simple tentacle as long as diameter of pupil. Four to six small filaments on either side of the nape about one-fourth as large as the orbital tentacle, their attachment alternately in a semi-double row. Lateral line incomplete, terminating below fifth dorsal ray.

Color in alcohol light straw generally, upper lip with some dark pigment, occiput, lateral line and a narrow strip on either side of dorsal with light chestnut-brown pigment, this very dense and forming a pronounced crescentic line across the back at the occiput, a narrow dark band at base of caudal fin excluding the middle, and the outer 2 or 3 rays above and below, a dark spot at base of the supports of the vertical fins. Peritoneum silvery with a sprinkle of chestnut colored pigment spots.

Remarks.—This species is close to *steindachneri* but differs in color pattern.

Ophioblennius xiphiodon Clark

Ophioblennius xiphiodon Clark, Proc. California Acad. Sci., ser. 4, 22(7): 483-484. 1938 (Peru).

A paratype of this species, U.S.N.M. 120026, was taken at Callao, Peru, in February, 1935, by the Templeton Crocker Expedition 1934-35.

Remarks.—Distinguished from *pinchoti* in the fewer supports in the vertical fins and in color pattern.

Ophioblennius fernandezensis Clark

Ophioblennius fernandezensis Clark, Proc. California Acad. Sci., ser. 4, 22(7): 184. 1938 (Juan Fernández Island).

A paratype of the present species, U.S.N.M. 120027, taken at San Juan Bautista (Cumberland) Bay, Juan Fernandez Island, January 31, 1935, by the Templeton Crocker Expedition 1934-35.

Remarks.—Very close to *xiphiodon* but differs strongly in the plain coloration and in the tentacles at the nape.

Ophioblennius vanderbilti Fowler

Ophioblennius vanderbilti Fowler, Acad. Nat. Sci. Philadelphia Monogr. 2: 242-243, pl. 11, figs. 26, 27. 1938 (Oahu and Christmas Islands).

I quote Fowler's description: "Depth 4 to $4\frac{1}{2}$; head $3\frac{1}{4}$ to $3\frac{3}{4}$, width $1\frac{2}{3}$ to 2. Snout 4 to $4\frac{1}{2}$ in head; eye $2\frac{2}{3}$, greatly exceeds snout or interorbital; maxillary reaches $\frac{1}{2}$ to $\frac{1}{3}$ in eye, length 3 in head; 4 canines in front of each jaw, each greatly bent or arched, each outer lower one flaring outward nearly to right angle; interorbital $3\frac{2}{3}$ to $3\frac{3}{4}$ in head, broadly convex. Gill opening forms free fold over isthmus.

"Body with smooth scaleless skin. Lateral line incomplete, superior, only running back as far as end of depressed pectoral. Fringed supraorbital flap nearly as long as pupil. Short nasal flap. Fringe of short filaments in single row transversely across occiput.

"D. XII, 13 or 14, third spine $2\frac{2}{3}$ to $2\frac{1}{2}$ in head, third ray $1\frac{1}{3}$ to 2; A.14,⁴ fin height $2\frac{1}{2}$; caudal 1, slightly emarginate; least depth of caudal peduncle $2\frac{1}{2}$ to $2\frac{2}{3}$; pectoral 1 $1/10$ to $1\frac{1}{8}$ rays 13; ventral $1\frac{1}{3}$ to $1\frac{2}{3}$ in head.

"Color of body russet, little paler on chest, breast and prepectoral, also on belly. Head drab nearly ecru drab below. Iris gray to silvery

white. Supraorbital filament and row of nuchal filaments gray black. Fins all light or pale brown, dorsals and anals grayish terminally."

Remarks.—This species is not represented in the national collections. Distinguished from *capillus* by the much shallower notch in the dorsal fin and by the grayish-black coloration of the dermal appendages.

Ophioblennius clarki, n. sp.

Ophioblennius sp. indet. Clark., Proc. California Acad. Sci., ser. 4, 22(7): 185. 1938 (Marquesas).

Description.—The present study indicates that Clark's undetermined specimen is a valid species. A single example was taken at Taiohae Bay, Nukuhiva Island, Marquesas, October 6-15, 1934. I quote Clark's description:

"Total length 32 mm.; body 26 mm.; head (9 mm.) 2.88 in head; depth (8) 3.25; eye (3) in head; snout (2) 4.5; maxillary (2.5) 3.6; interorbital (2) 4.5; D. XI-13, the spines long and slender, a short space between spinous and soft dorsal; A. I, 15⁵; V. 2, the rays long and slender; P. 16, base broad; C. truncate; branchiostegals about 4, gill membranes forming a fold across the isthmus a little anterior to base of ventrals; jaws about even. Two strong and markedly curved canines at symphysis of upper jaw, followed by two smaller ones; a pair of similar, strongly curved canines at symphysis of lower jaw; no secondary canine immediately behind it, but there appears to be a small one back at the posterior part of the jaw. About 27 muscular bands; no scales, but an arched lateral line of about 27 pores over the pectoral and backward. No color except the usual black area over the occiput; a small silvery patch on belly. A branched cirrus at nostril, a slender single one above eye, and comb of filaments at nape."

Remarks.—This species differs from *capillus* in having a definite space between the spinous and soft portions of the dorsal fin. No doubt there are XII spines in the dorsal instead of XI as given by Mr. Clark.

Named *clarki* in honor of the late H. Walton Clark, curator of fishes, California Academy of Sciences, San Francisco.

Ophioblennius phalacrus Clark

Ophioblennius phalacrus Clark, Proc. California Acad. Nat. Sci., ser. 4, 22(7): 184-185. 1938 (Nukuhiva).

⁴ Probably this count is II, 14.

⁵ Probably this count is II, 15 or II, 14.

I quote Clark's description: "Total length 32 mm.; body 26 mm.; head (9 mm.) 2.88 in body depth the same; eye (3) 3 in head; snout (2) 4.5; maxillary (2.5) 3.6; gape hardly reaching to eye; interorbital (2) 4.5; D. X, 13; A. 14; V. 2; P. 19; no scales, but lateral line short, arched over pectoral, the pectoral rather short, but broad. Branchiostegals 5, gill-membranes forming a shallow fold across the isthmus; caudal truncate or slightly emarginate. Teeth as usual in the genus, four stout, curved fangs about symphysis of upper and lower jaws, a palisade of small incisors in sides of jaws.

"Color: Posterior part of body cream color; head coarsely punctate with black spots, the largest of which are larger than pupil, the spots extending backward along base of dorsal."

Remarks.—Not represented in the national collections. Distinguished from all known representatives of the genus in the absence of dermal appendages and in the separate dorsal fins.

Ophioblennius webbii (Valenciennes)

Blennophis webbi Valenciennes, in Webb and Bathelot, Îles Canaries, Poiss., pp. 60–61. 1839 (Fort Ventura, Canary Islands); Günther, Cat. Fish. Brit. Mus. 3: 259. 1861 (Canary Islands).

Blennius webbii Poggi, [article in Guidebook of Canary Islands], "Guía de Santa Cruz de Tenerife" [p. d. 35]. 1881 (Canary Islands)

Blennophis webbii Vinciguerra, Atti Soc. Ital. Sci. Nat. 34: 321. 1892 (Canaries).

Ophioblennius webbii Fowler, Bull. Amer. Mus. Nat. Hist. 70(2): 1052–1053, fig. 434. 1936 (Tropical Atlantic) (Valenciennes); Norman, *Discovery* Rept. 12: 56. 1936 (Ascension Island).

Blennophis webbianus Valenciennes, op. cit. pl. 20, fig. 3 a–c.

Blennophis webbi Günther, Rept. Voy. *Chalenger* 1: 5. 1880 (Ascension Island).

Remarks.—I have seen no example of this species, and its occurrence in the Western Atlantic is doubtful. It differs from all known American species in having fewer dorsal spines and from all Western Atlantic forms in the much longer pectoral fins.

Ophioblennius lanieri Seale

Ophioblennius lanieri Seale, Allan Hancock Pacific Expeditions 9(1): 40, pl. 4, fig. 4. 1940 (Galápagos).

Remarks.—The present form is not represented in the national collections. An error occurs in the reported number of dorsal spines as

given in the original description, but plate 4, figure 4 by Seale (l. c.) is correct in this respect. Dr. W. M. Chapman, curator of fishes at the Academy, has kindly reexamined the holotype and reports 14 spines in the dorsal fin. The present form is distinguished from *pinchoti* in possessing a greater number of spines in the dorsal fin and lacking filaments at the nape.

Ophioblennius capillus, n. sp.

Fig. 2

Holotype.—U.S.N.M. 120032, *Albatross* Station 3921, night anchorage off Honolulu, T. H. Diamond Head Light, S. 62°, E. 3.9', May 6, 1902, surface, electric light. Standard length 21.8 mm.

Description.—The following measurements are expressed in hundredths of the standard length. Head 29.4. Depth 21.6. First dorsal spine 16.1. Depth caudal peduncle 10.6. Length of snout 6.9. Width of interorbital 7.8. Diameter of eye 10.6. Pre-anus 45.8. Pre-dorsal 30.7. Length of pectoral fin 25.7. Base of anal fin 39.0.

D. XII, 13. A. II, 14. P. 15, 15. V. I, 2. Br. 5. Body oblong, compressed, scaleless, profile gently convex from upper lip to nape, a weak depression at occiput and a slight keel in front of dorsal fin. Insertion of dorsal above mid-length of opercle, the spines a little higher than soft rays, the fin divided at point of transition by a deep notch, the last spine attached by membrane to the lower sixth of the first soft ray, posterior ray reaches rudimentary caudal elements. Anal similar to soft dorsal, the fin terminating pupil diameter short of lower caudal elements. Caudal peduncle slightly longer than deep, caudal fin lunate, equal length of head. Pectoral fin long, reaching opposite base of second anal ray, lower rays little thickened. Ventral fins inserted through vertical of occiput, reaching $\frac{2}{3}$ distance to vent. Lips thin, free laterally. Upper jaw nonprotractile, maxillary, reaching to below anterior margin of pupil. Upper jaw with 2 strongly hooked canine teeth on the premaxillaries, followed by 5 or 6 groups of minute conical teeth concealed in the lips. Lower jaw with 4 similar canines at symphysis of mandible, the outer pair nearly horizontal and strongly hooked toward the rictus, the apex concealed in the lip, a very small pair of canines about midlength of the mandible easily overlooked and exposed only by depressing the

gum. Gill rakers obsolete. Anterior nostril with a bifurcate appendage, orbital appendage trifurcate, the middle filament longest. Nape with a transverse series of fringes crossing the midline, 28 filaments in the series. Lateral line incomplete arched above the pectoral terminating below anterior dorsal rays.

Color in alcohol light straw generally, a russet shade across occiput, some dark pigment along base of dorsal fin, abdomen from base of ventrals to anus with a silvery sheen, dermal appendages colorless.

Remarks.—Differs from *Ophioblennius van-derbilti* Fowler in having only two canines in the upper jaw, more rays in the pectoral fins, nasal and orbital appendages, and in the much deeper notch in the dorsal fin. Other differences will be found in the key on page 374.

Named *capillus* in reference to the hairlike row of filaments across the nape.

Leoblennius, n. g.

Description.—Body scaleless, moderately elongate, compressed, the back somewhat elevated. Vertical fins moderate, composed of spines and soft rays. Dorsal fin with a notch at juncture of differentiation. Ventral fins jugular, formula I, 4. Pectoral fins large, reaching past anal spines. Branchiostegal rays 5. Gill openings wide, free, forming a moderate fold across the isthmus. Gill rakers in moderate number. Teeth all conical, 4 strongly hooked canines on the premaxillaries and 4 similar canines at symphysis of mandible. Upper jaw nonprotractile, lips free laterally. Anterior nostrils orbits and nape with dermal appendages, the latter with a series of filaments crossing the midline. Lateral line complete or nearly so, arched anteriorly over the pectoral fins, several pores missing posteriorly.

A well-marked genus of tropical blennies whose affinities seem to be close to *Gloriella* on the one hand and *Ophioblennius* on the other, but differing from the former in the character of the gill openings and from the latter in having 4 rays in the ventral fins.

Genotype.—*Leoblennius schultzi*, n. sp.

Leoblennius schultzi, n. sp.

Fig. 3

Holotype.—U.S.N.M. 118037, *Albatross Station* 3921, night anchorage off Honolulu, T. H., Diamond Head Light, S. 62°, E. 3.9', May 6,

1902, surface, electric light. Standard length 25.4 mm.

Paratype.—U.S.N.M. 120096, same data as holotype. Standard length 26.0 mm.

Description.—The following measurements are expressed in hundredths of the standard length, respectively: Head 32.7; 31.9. Depth 32.7; 31.2. First dorsal spine 19.3; 18.5. Depth caudal peduncle 11.4; 11.5. Length of snout 9.84; 9.2. Width of interorbital space 11.8; 10.8. Diameter of eye 11.4; 11.2. Pre-anus 50.4; 53.8. Pre-dorsal 28.7; 29.6. Length pectoral fin 27.5; 30.4. Base of anal fin 38.2; 38.1.

D. XII, 13. A. II, 15. P. 15; 15. V. I, 4. Br. 5. Body scaleless, oblong, compressed, rather short and deep in comparison with other members of the present group. Dorsal profile well arched, convex from upper lip to above posterior nostril then oblique to origin of dorsal fin which is above preopercle margin. Dorsal spines notably higher than soft rays, the fin divided by a deep notch, last spine joined to first ray by membrane at lower $\frac{1}{2}$, last ray attached to caudal peduncle by membrane just before base of upper rudimentary rays of caudal fin, peduncle much deeper than long. Anal fin similar to soft dorsal, last ray free of membrane posteriorly and failing to reach lower caudal rays by pupil diameter. Caudal fin emarginate, its length about equal that of pectoral which reaches to above base of fourth anal ray, its outline symmetrical, lower rays very little thickened. Ventrals inserted below second dorsal spine, their tips reaching midlength of the pectoral fin. Upper jaw nonprotractile, lips free laterally, mouth small gape to below anterior rim of orbit. Four strongly hooked canine teeth at tip of upper jaw and four similar canines near symphysis of mandible, the outer pair deflected outward, no lateral canines evident at midlength of lower jaw. Gill rakers very minute, about 14 on lower arch, pseudobranchiae developed. Nostrils well separated, the anterior with a small, flat terminally fringed filament, orbital tentacle compressed, flap-like, short and blunt, a fleshy band across the nape almost connecting the lateral lines, the margin of which supports 32 filaments or fringes, slightly decreasing in length terminally. Lateral line conspicuously arched above the pectoral fin, its posterior portion indistinct with several pores missing along axis of body. Muscular impressions distinct posteriorly, about 18 from above vent to hypural.

Color in alcohol yellowish generally, a dusky band across occiput and a similar band across nape just before the band of cirri and joining the posterior rim of the eye, a small dusky area on lateral line below fourth dorsal spine, one on midline before dorsal fin, and a series of dusky shades along the back extending up on the membrane between first and second spines with transparent membrane between third and fourth spines, the color scheme alternating throughout length of the fin, gradually fading out on the soft rays. There are two dusky bands across the pectoral fin and a small black spot near the tip of each ray conspicuously marks the outline of the fin, three russet shades on opercle and a dash of the same color downward from lower rim of the eye, orbital tentacle dark at base, tip lighter, fringes on the nape plain yellowish, no dark pigment on upper lip nor at base of caudal fin.

Remarks.—This new species differs from all related species as indicated in the key on page 374.

I take great pleasure in naming this interesting species in honor of Dr. Leonard P. Schultz, curator of fishes, United States National Museum.

Blenniella, n. g.

Description.—Body scaleless. Dorsal with 13 spines, a deep notch between spinous and soft portions. Gill openings free from the isthmus. Teeth all conical, arranged in groups of 6 to 8 each; teeth of the units graduated the anterior tooth of each unit longest, the posterior one shortest; each group appearing as a deeply incised tooth with 6 to 8 minute cusps arranged step-fashion, as viewed laterally; lower jaw with similar teeth and in addition 4 strongly retrocurved canines at symphysis of mandible. This genus is intermediate between *Ophioblennius* and *Giffordella*. It is distinguished from the former by the absence of canines in the upper jaw and from the latter by the unrestricted gill openings.

Genotype.—*Blenniella rhessodon*, n. sp.

Blenniella rhessodon, n. sp.

Fig. 4

Holotype.—U.S.N.M. 118029, *Albatross* Station 3921, night anchorage off Honolulu, T. H. Diamond Head Light, S. 62°, E. 3.9', May 6, 1902, surface, electric light. Standard length 22.6 mm.

Paratypes.—U.S.N.M. 120031. Standard lengths 21.4 to 22.7 mm.

Description.—Seven examples were measured and their standard lengths in mm. are as follows: 22.6; 22.6; 22.7; 21.4; 22.0; 21.4; 21.9. The following measurements are expressed in hundredths of the standard length, respectively: Head 21.2; 20.8; 21.1; 19.7; 21.4; 23.4; 22.4. Depth of body 16.8; 15.5; 15.0; 15.5; 15.8; 15.9; 15.5. Height first dorsal spine 9.74; 10.2; 10.6; 10.3; 9.56; 11.2; 9.6. Depth caudal peduncle 7.5; 7.5; 7.9; 8.0; 6.8; 6.5; 8.2. Length of snout 4.4; 4.4; 4.84; 4.7; 4.54; 5.14; 5.0. Interorbital width 5.75; 6.2; 6.17; 6.6; 5.9; 5.6; 5.94. Diameter of eye 8.4; 8.4; 7.93; 8.9; 8.2; 7.94; 8.68. Pre-anus 40.1; 41.6; 42.3; 43.2; 42.7; 43.4; 43.8. Pre-dorsal 22.1; 22.6; 22.0; 23.0; 21.8; 22.4; 22.4. Length pectoral fin 25.7; 27.0; 26.9; 29.1; 27.3; 27.6; 26.5. Base of anal fin 43.8; 44.7; 45.4; 46.4; 45.4; 46.2; 46.6.

D. XIII, 19. A. II, 20. P. 13; 13 or 13; 14. V. I, 2. Br. 5. Body naked, oblong, compressed, rather slender, back not elevated, profile of snout gently convex before eyes, slightly oblique to origin of dorsal then nearly straight to caudal base. Origin of dorsal fin above midlength of opercle. Spines little lower than soft rays, the fin divided by a deep notch nearly to its base, last ray attached to peduncle by membrane and not quite reaching upper supplemental rays of caudal fin. Anal similar to soft dorsal but not extending quite so far back, the last ray free from peduncle which is slightly longer than deep. Caudal fin truncate or weakly emarginate its length about equal to that of the head. Pectoral fin long, reaching to above third anal ray. Ventral fins inserted below midlength of opercle and in contact with the membranous fold across the isthmus, their extremity reaching half the distance from their base to the vent. Gape small, lips free laterally, the maxillary reaching nearly to opposite center of pupil. Teeth in the upper jaw minute, conical disposed in groups of 6 to 8, the anterior tooth of each group notably longer than the posterior tooth, the intervening teeth graduated, the apexes of the teeth in each unit forming an oblique edge. These groups form a continuous series in the upper jaw, about 6 units on either side. Lower jaw with similar teeth and in addition 4 strongly hooked canines near the symphysis of the mandible, the outer pair horizontal, their apexes directed posteriorly and somewhat concealed by the lower

lip. Gill openings free, forming a fold across the isthmus, gill rakers minute, 12 on anterior arch, pseudobranchiae developed. Anterior nostril with a simple filament, orbital filament simple, nape without cirri. Lateral line high, terminating below posterior dorsal spines. Twenty-four myomeric impressions between anus and hy-pural.

Color in alcohol light straw generally, immaculate except upper surface of the head where the postfrontal region is sprinkled with minute black dots. The occipital region has slightly larger black spots surrounded by circles of chestnut brown, giving the impression of small bull's-eyes or targets.

Remarks.—This new species can be recognized from other related genera of blennoid fishes by the key on page 374.

Named *rhessodon*, ragged tooth, in reference to its uneven dentition.

Genus *Gloriella* Schultz

Gloriella Schultz, Copeia 1941(1): 17–18. 1941.

Four strongly hooked canine teeth on the premaxillaries and a single series of small conical teeth not interrupted by the canines. Four similar canines near symphysis of the mandible. Gill openings restricted laterally, not extending below base of lower pectoral ray. Lateral line incomplete. Nape with a fringe of cirrus extending across the midline; anterior nostril with a fringe of tentacles. Caudal fin rounded, the middle rays longest. Other characters those of the genotype.

Genotype.—*Cirripectes caninus* Herre.

Gloriella canina (Herre)

Cirripectes caninus Herre, Philippine Journ. Sci. 59(2): 284. 1936 (type locality: Ternate Island, Moluccas); 70(4): 342. 1939.

Genus *Giffordella* Fowler

Giffordella Fowler, Proc. U. S. Nat. Mus. 80(6): 14, fig. 4. 1932 (Nukuhiva Island, Marquesas Islands) (genotype: *Giffordella corneliae* Fowler).

Giffordella corneliae Fowler

Giffordella corneliae Fowler, Proc. U. S. Nat. Mus. 80(6): 1–16, fig. 4. 1932 (Marquesas).

Original description: “Depth 4 to 4½; head 3¼ to 4; width 1¼ to 1½; snout 3 to 3½ in head; eye 2½ to 3 in head, greater than snout to subequal with interorbital; maxillary reaches back ½ to ¼ in eye length, 2½ to 2⅞ in head; teeth rather large, simple, conic, curved, uniserial in jaws and lower as 10 flaring outward each side; interorbital 3 to 3½ in head, well convex. Gill openings large, extends forward about opposite hind eye edge, isthmus width about half eye. Body scaleless. No flaps or tentacles.⁶ Lateral line not evident, side medianly with axial longitudinal impression. D. 14, 14, fin height about ⅔ of head and divided by deep median notch, a little behind vertical of anal original; A. 14, each membrane notched terminally, fin height about one-half of head; caudal slightly less than head, hind edge slightly emarginate; least depth of caudal peduncle 2 to 2⅔ in head; pectoral slightly longer than head, lower median rays longest, reaches little beyond anal origin; ventral nearly long as head, of 2 simple rays.

“Largely transparent brownish or colorless. Dark pigment spots on cranium. Iris silver gray to white.

“*Type.*—U.S.N.M. 91821, collected near light, Nukuhiva, Marquesas Islands, September 25, 1929. Also 11 paratypes, same data, 16 to 22 mm.

“Named for Mrs. Cornelia Bryce Pinchot, first lady of Pennsylvania.”

⁶ In connection with the present studies, the holotype of *Giffordella corneliae* Fowler, U.S.N.M. 91821, was reexamined and the following characters (not mentioned in the original description) were observed: Anterior nostril with a small simple filament on the inner edge, a well-developed simple orbital tentacle attached to the membrane of the eye superiorly, and a single similar filament at the occiput on either side of the midline. Four small strongly hooked canines near symphysis of the mandible, the outer pair more or less horizontal. Lateral line distinct anteriorly with 5 or 6 pores. D. XII, 14; A. II, 14; P. 14.